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In the claims:

1. (Currently amended) A simulation system comprising:
a simulation reference simulator (30) adapted to receive an SRML simulation model (32) including which includes simulation behavior and structure of [[a]] simulation ~~item~~ items (20) contained therein by way of simulation specific scripts and markup, wherein said simulation reference simulator (30) responds to said simulation specific scripts and comprises:
an item manager (44) for loading properties of each of said items (20) of the simulation model (32); and
an event manager (46) for processing the simulation model (32); wherein the event manager (46) and item manager (44) are used by the simulator (30) to simulate.
2. (Original) The simulation system of claim 1 comprising a host (36) in operative communication with said simulation reference simulator (30) and including said SRML simulation model (32).
3. (Original) The simulation system of claim 1 wherein said simulation reference simulator (30) comprises a random number generator (48) in operative communication with said item manager (44) and event manager (46) for generating random numbers.
4. (Original) The simulation system of claim 1 wherein said simulation reference simulator (30) comprises means for processing mathematical and statistical functions (52), said means in operative communication with said item manager (44) and event manager (46) for generating random numbers.
5. (Currently Amended) The simulation system of claim 1 wherein said item manager (44) is in operative communication with an XML parser (54) for building a validated Document Object Model (DOM) tree in the process of loading said simulation items (20) of the simulation model (32).

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6. (Original) The simulation system of claim 2 wherein said host comprises a general purpose digital computer including memory storing a host program.

7. (Original) The simulation system of claim 1 comprising means for providing an output (34) indicative of the simulation process.

8. (Currently amended) The simulation system of claim 1 wherein said event manager (46) is adapted to process the simulation model (32) by communicating process commands comprising SendEvent, PostEvent, ScheduleEvent, and BroadcastEvent wherein said simulation specific scripts invoke said commands.

9. (Currently amended) A method of conducting simulations comprising:

defining a simulation model (32) having simulation specific scripts with a Simulation Reference Markup Language (SRML) that is domain specific to simulations;

communicating said model (32) to a simulation reference simulator (30);
executing said model (32) with said simulation reference simulator (30); and
providing an output (34) of modeled events.

10. (Original) The method of claim 9 wherein the step of defining a simulation model (32) includes defining a plurality of items (20) wherein at least one item includes an ItemID and an ItemClass property.

11. (Original) The method of claim 10 wherein the step of defining a simulation model (32) includes inputting said items (20) using a host environment (36).

12. (Original) The method of claim 10 wherein the step of communicating said model (32) with said simulation reference simulator (30) includes the step of loading each item (20) of said simulation model (32).

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13. (Original) The method of claim 12 wherein the step of loading includes communicating items with an item manager (44) to an XML parser (54) to build a Document Object Model (DOM) tree for said item.

14. (Original) The method of claim 10 wherein at least one item includes an Event property.

15. (Original) The method of claim 14 wherein the step of executing said model (32) with said simulation reference simulator (30) includes the step of processing each Event property with an event manager (46).

16. (Original) The method of claim 9 wherein the step of executing said model (32) with said simulation reference simulator (30) includes the step of generating random numbers with a random number generator (48).

17. (Currently amended) A computer-readable storage medium having computer-readable program code devices embodied therein for simulating events, comprising:

instructions comprising simulation specific scripts representing a simulation model having a plurality of items wherein each Item (20) represents an article, process or system and includes a Property, said Property including an ItemClass (26) for associating items.

18. (Previously Presented) The computer-readable medium of claim 17 wherein each Item includes an ItemID defining a script object.

19. (Previously Presented) The computer-readable medium of claim 17 wherein said Property includes Links to other items.

20. (Currently amended) The computer-readable medium of claim 17 wherein said Property includes a Location identifier of the Item.

21. (Currently amended) The computer-readable medium of claim 17 wherein said ItemClass (26) is linked to a SuperClass (27) for associating groups of ItemClasses.

22. (Cancelled)

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23. (New) A computer system for performing simulations comprising:

a host for providing a simulation model (32) comprising simulation specific scripts;

a simulation reference simulator for processing said simulation model (32); and

an output terminal for outputting the process of said simulation model (32).

24. (New) The simulation system of claim 5 wherein said item manager (44) constructs said simulation behavior from said simulation specific scripts specified in an XML and constructs item classes that utilize said DOM tree during simulation execution.

25. (New) The simulation system of claim 1 wherein said simulation reference simulator (30) receives said SRML simulation model comprising at least one item class definition that describes the functionality for similarly named items according to a prescribed inheritance mechanism.